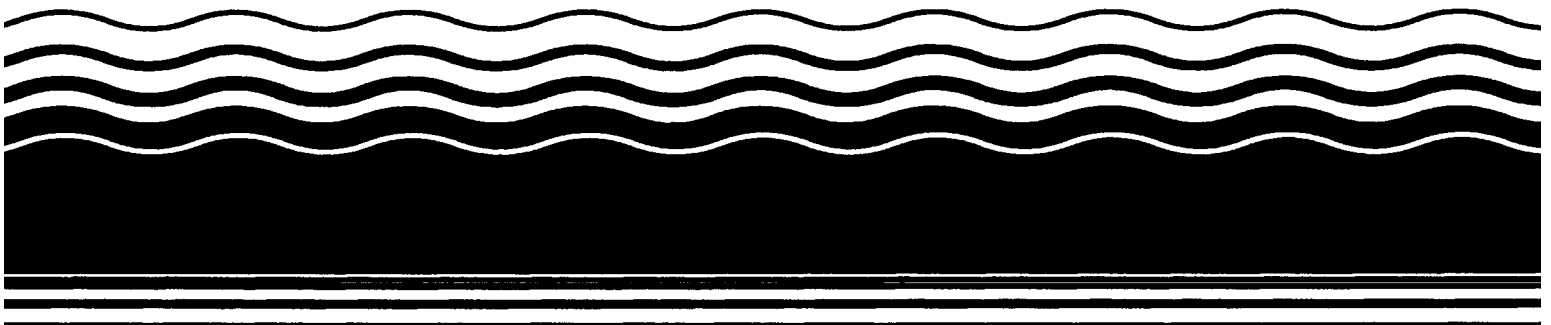




National Remedy Review Board

Progress Report: Fiscal Year 1996



National Remedy Review Board

Progress Report:
Fiscal Year 1996



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TABLE OF CONTENTS

Introduction	1
EPA's Superfund Reforms	1
The National Remedy Review Board	2
Summary of Fiscal Year 1996 Accomplishments	4
Board Reviews	4
Year-End Assessment	7
Operating Improvements	8
FY96 Operating Costs and FY97 Cost Projections	9
Conclusion	9

Attachments:

Attachment 1

11/28/95 EPA Memorandum: "Formation of the National Superfund Remedy Review Board"

Attachment 2

National Remedy Review Board Members

Attachment 3

Chart Depicting Board Review Timing for High Cost Cleanups in the Superfund Site Remediation Process

Attachment 4

Role of Interested Parties in the Review Process

Attachment 5

Full Text of National Remedy Review Board Advisory Recommendations Publicly Available as of November 1996

Attachment 6

9/26/96 EPA Memorandum: "National Superfund Remedy Review Board"

Introduction

EPA created the National Remedy Review Board (the Board) in January 1996 as part of a comprehensive package of reforms designed to make the Superfund program faster, fairer, and more efficient. This report highlights the Board's significant accomplishments in its first year of operation. It also presents information intended to help those interested in the Board's work learn more about the review process, its contribution to the Superfund program, and how interested parties can contribute to review efforts.

In the next section we describe the Superfund reform initiative and explain how the Board contributes to its goals. The following sections present information on the Board's first year of operation, its effect on Superfund cleanups, and resource issues. Included as attachments to this report are several EPA documents and memoranda that provide detailed information about Board operating procedures, cleanup decision reviews, and other issues.

EPA's Superfund Reforms

The Superfund program is one of our country's most ambitious and complex environmental programs. It arose out of the need to protect citizens from the dangers posed by abandoned or uncontrolled hazardous waste sites. When CERCLA¹ (the Superfund law) was enacted, the challenge of cleaning up what was assumed to be a few hundred discrete, land-based cleanups appeared relatively straightforward. However, the problem of neglected hazardous waste sites has revealed itself to be far more complicated and widespread than anyone at first realized.

We now recognize that the number and complexity of hazardous waste sites across the nation dwarf original estimates. To date, EPA has identified more than 41,000 sites and assessed more than 39,000 of them. Almost 1,400 of these sites have been considered a serious enough threat to be designated a Federal priority for cleanup on the National Priorities List (NPL). EPA has completed construction of all cleanup activity at about thirty percent (410) of these. The vast majority of the remaining NPL sites are either under study or being cleaned up.

In addition, Superfund has conducted emergency responses and prompt removal actions to attack the most immediate threats of toxic exposure at more than 3,000 sites in

¹Superfund is authorized by the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA), as amended. 42 U.S.C. §9601 et. seq. The program's principal implementing regulation is the National Oil and Hazardous Substances Pollution Contingency Plan, also known as the NCP, 40 CFR Part 300.

communities across the country. Through these “emergency response” actions, EPA continues to protect public health and the environment from immediate risks.

As a logical outgrowth of EPA’s experience in managing the Superfund program, EPA has put in place a series of Superfund reforms. These reforms substantively change the way the Superfund program handles its cleanup responsibilities within existing laws. They are aimed at accelerating the pace and reducing the cost of cleanups, streamlining remedy selection, increasing fairness, promoting economic redevelopment, and better integrating Federal and State cleanup programs. Within these changes, however, remedies are preferred that incorporate treatment technologies and provide long-term reliability for site cleanup. The Agency believes these reforms will save cleanup dollars without sacrificing public health or environmental protection. In October 1995, EPA announced its final round of reforms. One of the principal reforms in this final round is the National Remedy Review Board.

The National Remedy Review Board

Assistant Administrator Elliott Laws announced the Board's formation in a November 28, 1995, memorandum to Regional Waste Management Division Directors (attachment 1). As stated in the memorandum, the Board's goals are to promote cost-effectiveness and national consistency in remedy selection at Superfund sites. To accomplish this, EPA staffed the Board with technical experts and senior managers from each EPA Region and several EPA Headquarters offices. This group of experienced personnel provides a unique and impartial audience with which to discuss cleanup strategies, issues of national consistency, and the cost-effectiveness of cleanup actions. The Board analyzes proposed site-specific cleanup strategies in “real time” to ensure that they are consistent with the Superfund law, regulations, and relevant agency guidance. Attachment 2 presents a list of Board members.

The Board reviews all proposed cleanup decisions where (1) the proposed action costs more than \$30 million; or (2) the proposed action costs more than \$10 million and this cost is 50% greater than that of the least-costly, protective cleanup alternative that also complies with other laws or regulations that are “applicable” or “relevant and appropriate” to a site decision or action.

The Board plans to review sites early in the remedy selection process, before the Region releases the proposed plan for public comment. Occasionally, however, a post-proposed plan site may benefit from Board review. For example, remedy changes in response to public comment may increase the total remedy costs. Where these additional

cleanup costs exceed 20 percent of the original cost estimate and trigger normal Board review criteria, the Board may review the draft remedy. Please see attachment 3 for a depiction of the various steps in the Superfund remedial process and where Board review occurs.

National Remedy Review Board Process

- The EPA remedial project manager (RPM) in charge of the site develops an informational site package that forms the basis of Board review. The package presents basic site information as well as technical information on exposure and risk assessment scenarios, cleanup goals, and cost estimates for various cleanup alternatives.
- The Region consults with key State/Tribe decision makers to guarantee State/Tribe concerns are conveyed accurately and completely in the package.
- The RPM also solicits information from PRPs who conduct remedial investigation/feasibility studies (RI/FS) and community representatives. Their submissions are included as attachments to the informational site package.
- Each site decision discussion is divided into two phases: an **information sharing** phase, to which State/Tribe representatives are routinely invited, and a **deliberative** phase. The Board will invite the State/Tribe to participate in the deliberative discussion for State/Tribe-lead Fund-financed decisions, and for State/Tribe enforcement-lead decisions where the State/Tribe seeks EPA concurrence. Otherwise, the Board limits its deliberative discussions to EPA personnel.
- Shortly after each review, the Board sends any advisory recommendations to the appropriate Regional Division Director in a brief memorandum.

After its review, the Board issues advisory recommendations as to how or whether a potential Superfund site remedy decision can be improved. The recommendations are not binding, but EPA Regional decision makers give them substantial consideration. Although this effort is a valuable enhancement to the current decision making process, it is important to remember that this reform does not change current delegation of authorities or diminish in any way the public's current role in site cleanup decisions. Please refer to attachment 4 of this document for a more detailed explanation of the role of interested parties in the review process.

Summary of Fiscal Year 1996 Accomplishments

Fiscal year 1996 has been a challenging but very productive year. Below are some of the Board's significant accomplishments in its initial year of operation.

- Developed the Board's mission, identified key technical experts and managers, and began deliberative operations within eight weeks of the formal announcement from Assistant Administrator Elliott Laws.
- Held deliberative meetings in January, March, May, June, and August.
- Reviewed each of 12 proposed Regional Superfund decisions that triggered Board review criteria.
- Issued substantive or technical recommendations for nine of the 12 decisions reviewed. These recommendations are expected to increase the cost effectiveness of the decision by strengthening overall cleanup strategies. The Board supported without substantive comment three of the proposed actions.
- Contributed to improved national consistency in Superfund remedy selection.
- Recommended analyses that may ultimately reduce total cleanup costs for all sites reviewed in fiscal year 1996 by as much as \$15 million to \$30 million (please see next page for further explanation).
- Contributed to an enhanced role in Superfund remedy selection for States/Tribes, private parties, and communities at high stakes sites.
- Confirmed that, overall, the Superfund program is making sound, cost effective, remedy decisions that are consistent with the Superfund law, its regulations, and guidance.

Board Reviews

Of the 12 proposed cleanup decisions submitted by EPA Regional offices for review, the Board fully supported three decisions with only minor recommendations. Of the remaining nine, the Board generally supported, with technical recommendations, another three decisions. For six decisions, the Board offered more substantive recommendations. In all cases, the Regions will conduct analyses to decide whether and

to what extent the reviews may ultimately affect their cleanup approaches. For a summary of characteristics for all decisions reviewed in 1996 see Table 1.

Although several Regions are still considering Board comments on proposed decisions, already the Agency is encouraged by the range of benefits observed from the review process, including improved national consistency, clarity of decisions, and cross-Regional communication on key remedy selection issues. In some cases review recommendations have contributed to much lower site cleanup costs. For example, in Region 8, Board advisory recommendations regarding management of low-level threats at the Petrochem/Ecotek site contributed to an estimated reduction in total cleanup costs of approximately \$8 million.

**What Does The Board Look At
When It Reviews A Site Decision?**

The Board analyzes the cleanup strategy to ensure that it is consistent with the Superfund law and the National Oil and Hazardous Substances Pollution Contingency Plan (or NCP). The NCP is the Federal regulation that details procedures for responding to oil or hazardous substance releases. The Board also considers relevant EPA cleanup guidance.

When they review a site, the Board members ask many questions about the proposed cleanup strategy. Site-specific circumstances nearly always influence the nature of the discussion. Among others, Board members investigate subjects like these below:

- What are the site characteristics that present a threat to human health and the environment?
- What is the rationale behind exposure scenarios and risk assumptions?
- What are the details of the Regional proposal for site cleanup?
- Are the cleanup goals appropriate and attainable?
- Have other approaches to achieve the cleanup goals been evaluated?
- Are the cost estimates reasonable?
- What are the concerns of the States/Tribes, PRPs, and communities?
- Is the strategy consistent with other Agency decisions?

At the Jack's Creek site in Region 3, Board discussion of principal threats may ultimately reduce soil cleanup costs at the site by as much as \$10 million to \$15 million. EPA expects additional cost reductions in the future from other fiscal year 1996 reviews. Overall, the Board members indicate potential cost reductions in the range of \$15 million to \$30 million in total site cleanup costs from reviews conducted this fiscal year.

Of course, cost reductions are only part of the story. By targeting sites for review early in the Superfund process -- in most cases before proposed plan issuance -- important

sites benefit from the Board's expertise and discussion before EPA site managers make key decisions in the final remedy, reducing the potential for revising the cleanup strategies later in the process. Moreover, cost reductions do not reflect the value of benefits that come from a general increase in scrutiny of cleanup costs, increased national consistency in remedy selection, improved technical analysis of promising cleanup strategies, better-articulated decision rationale at high stakes sites, and increased confidence of Agency staff and stakeholders in the final remedy.

In addition, the review process has stimulated cross-Regional dialogue on a broad range of issues that affect sites other than the high-cost sites. For example, the Jack's Creek review exposed the fact that although most EPA Regions used a particular model to assist in calculating adult lead exposure, several did not. Because the Board members communicate the lessons learned from their reviews within and across the Regions, project managers at a site in Dallas, Texas, realized that they might also use the model. As a result, they were able to adjust lead cleanup goals and potentially save a significant amount of money while improving overall program consistency.

Attachment 5 provides the full text of publicly available Board recommendations as of November 1, 1996.

TABLE 1: FY96 BOARD REVIEW SUMMARY

<i>Site and Region</i>	<i>Review Date</i>	<i>Decision Stage at Review</i>	<i>Nature of Recommendations</i>	<i>Decision Stage as of 9/30/96</i>
Fernald (OU5), R5	January	Post PP	Fully Support*	ROD signed
Petrochem, R8	January	Post PP	Substantive*	ROD signed
Operating Industries, Incorporated, R9	January	Pre PP	Fully support*	ROD signed
Fernald (OU3), R5	March	Pre PP	Fully support w/ minor comment*	ROD signed
Coleman Evans, R4	May	Post PP	Substantive	Pending
Petroleum Products, R4	May	Pre PP	Substantive	Pending
DuPont Necco Park, R2	May	Pre PP	Technical*	PP issued
Roebbing Steel, R2	June	Pre PP	Technical*	ROD signed
Jack's Creek, R3	June	Pre PP	Substantive*	Pending
Harbor Island Sediments (OU2), R10	August	Post PP	Substantive	Pending
New Brighton Arden Hills, R5	August	Pre PP	Substantive	Pending
New Bedford Harbor, R1	August	Pre PP	Technical*	Pending

Key: OU=operable unit, R=Region, PP=proposed plan, ROD=record of decision

* Asterisk indicates that the Board review memorandum for this site is publicly available as of November 1996, and is contained in attachment 5. Please consult the appropriate Regional Board member for the status of the remaining memoranda.

Year-End Assessment

To assess its overall performance in fiscal year 1996, the Board conducted an in-depth analysis of its effect on individual site decisions. In interviews with Regional staff who participated in the reviews, Board members addressed subjects such as the effects of the reviews on site cleanups; how the reviews affected management involvement in site decisions; and whether the reviews improved remedy consistency, remedy protectiveness, or cost effectiveness. They also discussed ways to improve the review process.

Overall, participants found the experience a positive and worthwhile contribution to the remedy selection process for their respective sites. Generally, these Regional staff believe the process improves national consistency on important issues, adds credibility to Regional decisions, and can identify money-saving alternatives the initial Regional analyses did not consider. On the other hand, Regional staff expressed some frustration with the workload the review process places on them. They also raised concerns about the potential for delays in cases where reviews raise fundamental questions. Summarized below are responses from the Regional review participants to general questions about the Board's effect on the cleanup decisions.

- The reviews did not affect the cleanup schedules for most of the proposed decisions.
- Overall, the prospect of Board review increased Regional management involvement in the proposed decisions. It also resulted, in some cases, in management interest at an earlier point in the decision making process than would have occurred otherwise.
- Some participants see a benefit for the Regions in that Board reviews and subsequent advisory recommendations add credibility to final Regional decisions since these decisions will have had the added benefit of additional independent technical review.

Operating Improvements

EPA recognizes that the Board's operating protocol need to reflect a meaningful role for parties with a stake in the review process. With this in mind the Board made a substantial investment early on to work with interested parties and understand their concerns. For example, States/Tribes felt strongly that since they work closely with EPA in developing proposed cleanup strategies the Board discussions would benefit from the State perspective. The Board agreed, and has adopted procedures to ensure significant State/Tribe involvement in the review process. In addition, PRPs and community advocates sought to guarantee that their interests would be accurately and completely conveyed in materials reviewed by the Board. In response to this concern the Board decided to solicit written technical comments from key PRPs and community groups. Attachment 4 describes in greater detail the role of interested parties in the review process.

As a result of the Board's dialogue with interested parties EPA issued a September 26, 1996, memorandum titled "National Superfund Remedy Review Board" that formalizes refinements in the Board's operating protocol (see Attachment 6). These refinements reflect the concerns of interested parties as well as EPA Regional project managers. Among other things, they will ensure: 1) timely review of proposed site decisions prior to the issuance of the proposed plans; 2) prompt notification of key private sector stakeholders, States/Tribes, recognized community groups and technical assistance grantees, and other Federal agencies; 3) thorough consideration of stakeholder concerns in the review discussions; and 4) a continuing dialogue with interested parties to assure that the Board process is agreeable and fair to all involved.

FY96 Operating Costs and FY97 Cost Projections

EPA estimates that fiscal year 1996 Board activities cost approximately \$523,250. These estimates include salary and expense monies for Board members, Board support staff, and Regional management/RPMs; travel to and from the Board meetings; and incidental costs (*e.g.*, fees for meeting rooms). These costs average out to approximately \$43,600 per decision reviewed by the Board.

In fiscal year 1997 the Board will likely review between 10 and 20 sites. Based on the 1996 average of approximately \$43,600 per decision and a five percent inflation rate, the Board will require between \$450,000 to \$900,000 for salaries, expenses, and travel.

Conclusion

This past fiscal year was a challenging one for the entire Agency. Government shutdowns and funding uncertainty disrupted site cleanups and increased the workload on both Headquarters and Regional EPA staff. Even so, the National Remedy Review Board accomplished a great deal. The hard work of the Board members and strong support of Regional management and staff has paid off in significant cost savings, improved national consistency, more robust decision analysis, and an enhanced role in the remedy selection process for States/Tribes, private parties, and communities at high stakes sites.

Overall, the Board believes its reviews confirm that the Superfund program is making sound, cost effective, remedy decisions that are protecting public health and the environment consistent with CERCLA, its regulations, and guidance. At the same time, the experience of the past year has shown that there are instances in which the management level, cross-Regional Board discussions can save money and add value both to proposed cleanup strategies and to program decision making as a whole. As the

Superfund program continues its work in the coming years, it remains important for EPA to provide both the public and Congress the assurance that Superfund remedies are both cost effective and protective of public health and the environment. The Board believes it has made important contributions to these goals in fiscal year 1996 and looks forward to similar success in the coming year.

Attachments:

- 1) 11/28/95 EPA Memorandum: "Formation of the National Superfund Remedy Review Board"
- 2) National Remedy Review Board Members
- 3) Chart Depicting Board Review Timing for High Cost Cleanups in the Superfund Site Remediation Process
- 4) Role of Interested Parties in the Review Process
- 5) Full Text of Publicly Available National Remedy Review Board Advisory Recommendations
- 6) 9/26/96 EPA Memorandum: "National Superfund Remedy Review Board"

ATTACHMENT 1

**11/28/95 EPA Memorandum:
“Formation of the
National Superfund Remedy Review Board”**

NOV 28 1995 [this was a stamp centered on the pg.]

MEMORANDUM

SUBJECT: Formation of National Superfund Remedy Review Board

FROM: Elliott P. Laws [Elliott P. Laws' signature was here]
Assistant Administrator

TO: Director, Office of Site Remediation and Restoration
Region I
Director, Emergency and Remedial Response Division
Region II
Director, Hazardous Waste Management Division
Region III, IX
Director, Waste Management Division
Region IV
Director, Superfund Division
Region V, VI, VII
Assistant Regional Administrator, Office of Ecosystems Protection and
Remediation
Region VIII
Director, Environmental Cleanup Office
Region X

PURPOSE

This memorandum requests your assistance in establishing the National Superfund Remedy Review Board recently announced by the Administrator as one of the key Superfund Administrative Reforms. This Review Board is intended to help control remedy costs and to promote both consistent and cost-effective decisions at Superfund sites, including federal facilities.

BACKGROUND

As you all know, cost plays an important role in Superfund response decisions. The statute, in fact, mandates that, in addition to being protective, all remedies must be cost-effective. This mandate is built into the remedy selection process established under the National Contingency Plan (NCP), and expanded upon in a number of related program guidances. In this year of greatly reduced budgets, it is even more important for us to focus on

this criterion in our decision making. On October 2, 1995, EPA Administrator Carol Browner announced a collection of Administrative Reforms intended to help our program achieve significant cost savings without compromising a remedy's protection of human health or the environment or reliability. Today, as one of these Reforms, I am announcing the formation of the National Superfund Remedy Review Board.

DISCUSSION

By establishing this Board, I intend to help control remedy costs by providing a cross-Regional management-level review of high cost (and thus, potentially controversial) decisions in "real time" on a site-specific basis.

Board Structure and Function

This national Review Board will be comprised of senior Agency managers or experts on remedy selection, cost effectiveness, and program implementation from both the Regions and Headquarters. Each Region will have one management-level representative on the Board. Headquarters representatives will include national experts from the Federal Facilities Restoration and Reuse Office, the Technology Innovation Office, the Office of General Counsel, ORD's National Risk Management Research Laboratory, and the Office of Emergency and Remedial Response (OERR). Other Offices may be requested to participate as the need arises. The Board will be chaired by Bruce Means, Senior Process Manager for Response Decisions in OERR.

All proposed cleanup actions at sites where: (1) estimated costs for the preferred alternative are over \$30M; or (2) proposed remedy costs are over \$10M **and** 50% greater than the costs of the least-costly, protective, ARAR-compliant remedy will be subject to the Board's review. As other cost control "rules of thumb" are developed (under a separate Administrative Reform), these "guides" may also be used to signal the need for this Board's review. My overall expectation, based on previous ROD history, is that this program should result in Board review of approximately 10% of FY96 actions.

The Review Board will consider the nature of the site, the risks posed by the site, regional and state/tribal opinions on proposed actions, the quality and reasonableness of the cost estimates, and any other relevant factors or program guidances in making "advisory recommendations" to the Regional Administrator regarding EPA's preferred remedy before a proposed plan is issued for public comment. The overall goal of the reviews will be to ensure sound decision making consistent with current law, regulations, and guidance. The Board's reviews will be performed quickly but will require advanced planning by the Region to account for the added review time. Remedies subject to Board review should be brought to the Board's attention as soon as the Region has identified them as likely 'preferred alternatives,' but in any case before the proposed plan is announced for public comment. Regions are encouraged to coordinate with OERR Regional Service Center Coordinators as early as possible in the process.

Especially since we are operating under a greatly reduced budget this year, I am sensitive to the likely increase in workload for you and your staff. This new Board will require additional work for us all and may briefly delay release of a small number of proposed plans by about two months. For these reasons, the Board will work to establish a review process that requires a minimum of travel and effort for Board participants. The Board is likely to form standing subgroups, based upon geography, expertise or workload. Reviews are likely to involve the faxing of relevant materials to subgroups for discussion by conference call after a brief review period. Details will be developed further as part of the Board's initial organizing discussions.

The Board is expected to be fully operational by January 1996. However, proposed remedies planned for issuance in the first quarter of FY '96 which meet the screening criteria note above should also be discussed with my office.

Key Messages

By establishing this Board, I want to encourage decision makers to think even harder about the costs of response actions at every Superfund site.

However, this effort does not change the Agency's delegation authorities or alter in any way the public's current role in site decisions. This current effort is intended to facilitate the application of our national program's extensive experience to a select number of "high stakes" and thus, potentially controversial site decisions.

IMPLEMENTATION

If you have not already done so, please send your nominations for Board membership by December 8, to Bruce Means at (703) 603-8815; FAX: (703) 603-9103; Mail code (5204G). We have already welcomed the nominations of Walter Graham (Region 3), Wendy Carney (Region 5), Bill Honker (Region 6), and Wayne Pierre (Region 10). Bruce will be contacting your representatives shortly to schedule an introductory conference call later this month. For your information, Attachments A and B present an overview of the Board's tentative start up schedule and membership, respectively. I expect the Board to be up and running by the **beginning of January 1996.**

I recognize that this additional review for the sites that exceed these cost control triggers may briefly delay the release of proposed plans. However, it is critically important to the Agency that we provide both the public and Congress the necessary assurances that Superfund dollars are being well spent. This Board will do much to provide those assurances.

Thank you for your prompt attention to this important matter.

Attachments

cc: Regional Administrators
Steve Herman, OECA

Bob Huggett, ORD
Jon Cannon, OGC
Romona Trovato, ORIA

ATTACHMENT 2

National Remedy Review Board Members

**NATIONAL REMEDY REVIEW BOARD
MEMBERSHIP
December, 1996**

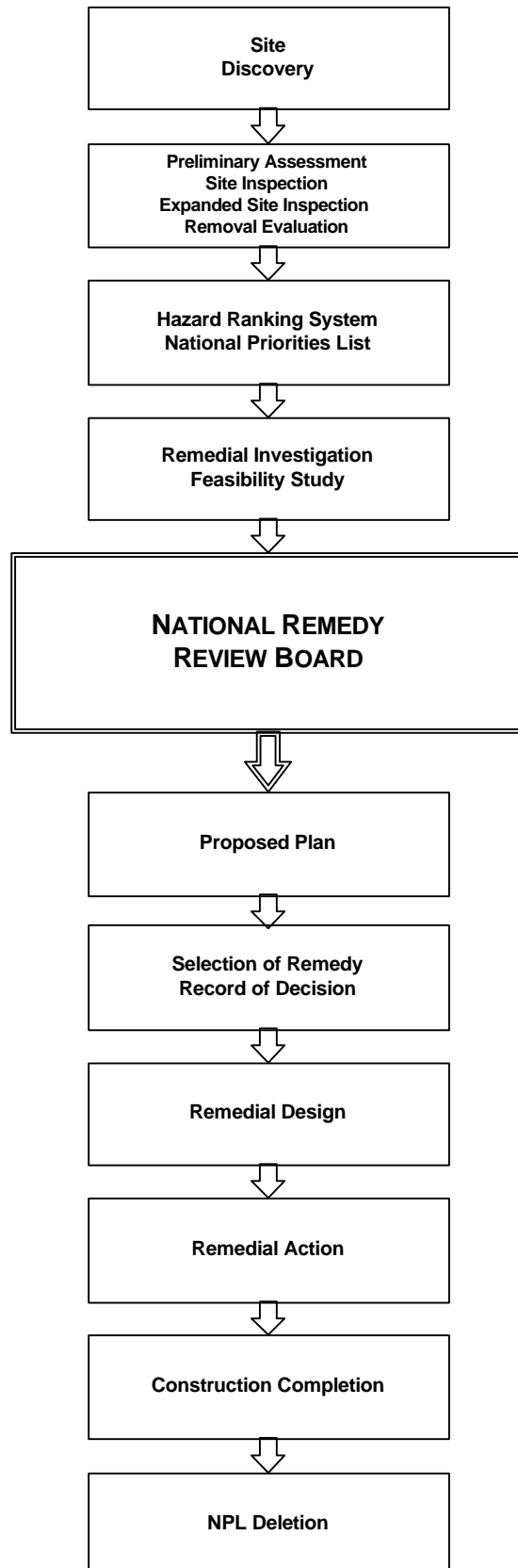
	REGION	NAME	PHONE	FAX
1	OERR	Bruce Means (Chair)	(703)603-8815	(703)603-9133
2	Region 1	Richard Cavagnero	(617)573-9641	(617)573-9662
3	Region 2	John Frisco	(212)637-4400	(212)637-4439
4	Region 3	Walter Graham	(215)566-3146	(215)566-3001
5	Region 4	Jan Rogers	(404)562-8792	(404)562-8788.
6	Region 5	Wendy Carney	(312)353-6553	(312)353-9306
7	Region 6	Bill Honker	(214)665-6726	(214)665-6660
8	Region 7	Craig Smith	(913)551-7050	(913)551-7145
9	Region 8	Gwen Hooten	(303)312-6571	(303)312-6897
10	Region 9	John Kemmerer	(415)744-2421	(415)744-1917
11	Region 10	Wayne Pierre	(206)553-7261	(206)553-0957
12	OERR	Paul Nadeau	(703)603-8794	(703)603-9133
13	OERR/ER T	Andre' Zownir	(908)321-6744	(908)321-6724
14	OGC	Brian Grant	(202)260-6512	(202)260-0584
15	TIO	Mike Kosakowski	(703)603-7192	(703)603-9135
16	FFRRO	Tim Mott	(202)260-2447	(202)260-5646
17	ORD/ NRMRL- Cin	Donald Sanning	(513)569-7861	(513)569-7620
18	ORIA	Mike Boyd	(202)233-9395	(202)233-9650
19	FFEO	Jean Rice	(202)564-2589	(202)501-0069
20	ORD/ NRMRL- Ada	Clint Hall	(405)436-8511	(405)436-8528

NRRB Staff Lead: Rich Norris (703-603-9053)

ATTACHMENT 3

Chart Depicting Board Review Timing for High Cost Cleanups in the Superfund Site Remediation Process

Board Review Timing for High Cost Cleanups in the Superfund Site Remediation Process



ATTACHMENT 4

Role of Interested Parties in the Review Process

NATIONAL REMEDY REVIEW BOARD ROLE OF INTERESTED PARTIES IN THE REVIEW PROCESS

The Agency has made noteworthy efforts to guarantee that concerns of States, Tribes, communities, and PRPs are heard during the review process. EPA Headquarters management and several Board members attended a variety of meetings this past year to help characterize and resolve concerns of those affected by the Board. EPA and State representatives held a special meeting in June 1996 to discuss State concerns and options for their involvement in Board activities. In addition, Agency managers participated in a meeting of the Information Network for Superfund Settlements in May to discuss private party concerns with the Board's operation. EPA also met extensively with the Federal departments that the Board's activities may affect.

As a result of these discussions, the Board has included in its operating procedures a clear and meaningful role for affected groups: communities, States and Tribes, and key PRPs now all have an opportunity to present concerns to the Board. From the beginning, stakeholders expressed great interest and enthusiasm for the Board in concept. However, each group expressed practical concerns about how specific Board operating protocol might affect them. Some of the more fundamental issues and related Board procedures are summarized below and are detailed in a September 26, 1996, EPA memorandum (See attachment 5).

- States/Tribes felt strongly that, although they work closely with EPA in developing proposed cleanup strategies, the Board discussions would benefit from the State perspective as "co-regulator." The Board agreed, and has adopted procedures to ensure significant State/Tribe involvement in the review process. The Region will consult with the affected State/Tribe well before the Board meeting to ensure the key State/Tribe decision makers understand the nature and intent of the review process. The Region will also consult with key State/Tribe decision makers when developing the informational site review package provided to all Board members to guarantee State/Tribe concerns are conveyed accurately and completely. The State/Tribe will also be given an opportunity to present their views to the Board at the review meeting.
- The Board will routinely invite State/Tribe decision makers to the information-gathering phase of its site reviews. The Board will invite the State/Tribe to participate in the deliberative discussion for State-lead fund-financed decisions, and for State/Tribe enforcement-lead decisions where the State/Tribe seeks EPA concurrence. Otherwise, the Board will limit its deliberative discussion to Agency personnel.
- PRPs and community advocates sought to guarantee that their interests would be accurately and completely conveyed in materials reviewed by the Board. In response to this concern the Board decided to solicit written technical comments from key PRPs and community groups. These submissions are to be attached to the informational site package provided to all Board members.
- Federal Facilities that deal with radioactive wastes or Base Realignment and Closure sites expressed concern that the initial criteria for deciding which sites the Board would review were too stringent. They believed this stringency would subject an unnecessarily large percentage of decisions to a lengthy Board review. The Board recognized that Federal Facility sites often present different cleanup challenges and involve different management and oversight frameworks. Therefore the Board, in coordination with EPA's Federal Facilities Restoration and Reuse Office and its Federal Facilities Enforcement Office, has been working to establish separate Federal Facility review criteria. The Board is using interim criteria until the final Federal Facility criteria are adopted. These are outlined in the September 26, 1996, memorandum mentioned above. As the Board gains experience reviewing Federal Facility sites it may re-evaluate these criteria.

ATTACHMENT 5

Full Text of National Remedy Review Board Advisory Recommendations Publicly Available as of November 1996

Fernald OU5, Region 5
Petrochem, Region 8
Operating Industries, Inc., Region 9
Fernald OU3, Region 5
DuPont Necco Park, Region 2
Roebing Steel, Region 2
Jack's Creek, Region 3
New Bedford Harbor, Region 1

MEMORANDUM

SUBJECT: National Remedy Review Board Findings on the Fernald
Environmental Management Project Site - OU5

FROM: Bruce Means, Chairman
National Remedy Review Board

TO: William E. Muno, Director
Waste Management Division
EPA Region 5

Purpose.

The purpose of this memorandum is to document the findings of the National Remedy Review Board (NRRB) on the proposed remedial action for the OU5 for the Fernald Environmental Management Project Site in Ohio.

Background.

As you recall, the NRRB was established as one of the October 1995 Superfund Administrative Reforms to help control remedy costs and promote both consistent and cost-effective decisions at Superfund sites. All proposed cleanup actions are to be reviewed by the Board where: (1) the estimated cost of the preferred alternative exceeds \$30M; or (2) the preferred alternative costs over \$10 M and this cost is 50% greater than that of the least-costly, protective, ARAR-compliant alternative. In its review, the NRRB considers the nature and complexity of the site; health and environmental risks; the range of alternative actions considered to address site risks; the quality and reasonableness of the cost estimates for alternatives; regional, State/tribal, and other stakeholder opinions on the proposed actions to the extent they are known at the time of review; and any other relevant factors or program guidances.

Generally, the NRRB makes "advisory recommendations" to the appropriate Regional decision maker prior to issuance of the proposed plan who is expected to give the Board's recommendations substantial weight. However, other important factors may influence the final Regional decision such as subsequent public comment or technical analyses of remedial

options. It is important to remember that the NRRB does not change the Agency's delegation authorities or alter in any way the public's current role in site decisions. This Reform is intended to bring to bear the program's extensive experience on decisions at a select number of high stakes sites.

NRRB Findings.

The NRRB reviewed relevant site information submitted on OU 5 for the Fernald Environmental Management Project Site and discussed related issues with the EPA Regional Remedial Project Manager on January 25, 1996. Based on this review and related discussion, the NRRB finds the proposed remedy to be consistent with actions taken at similar sites in other EPA Regions. Further, the NRRB finds that the proposed remedial action meets the requirements set forth in the National Oil and Hazardous Substances Contingency Plan (NCP) and applicable program guidance.

The Board members would like to thank Regional staff and management for their support and participation in this review process. If you have any questions about these findings, please call me at 703-603-8815.

cc: V. Adamkus
S. Luftig
E. Laws
T. Fields
J. Woolford
J. Breen
J. Clifford
P. Nadeau

SIGNED MAY 30, 1996

MEMORANDUM

SUBJECT: National Remedy Review Board Recommendations on the Petrochem/Ekoteck Superfund Site.

FROM: Bruce Means, Chairman
National Remedy Review Board

TO: Max Dodson, Assistant Regional Administrator
Office of Ecosystems Protection and Remediation
EPA Region 8

Purpose.

The purpose of this memorandum is to document the findings of the National Remedy Review Board (NRRB) on the proposed remedial action for the Petrochem/Ekoteck Superfund Site in Utah.

Background.

As you recall, the NRRB was established as one of the October 1995 Superfund Administrative Reforms to help control remedy costs and promote both consistent and cost-effective decisions at Superfund sites. All proposed cleanup actions are to be reviewed by the Board where: (1) the estimated cost of the preferred alternative exceeds \$30M; or (2) the preferred alternative costs over \$10 M and this cost is 50% greater than that of the least-costly, protective, ARAR-compliant alternative. In its review, the NRRB considers the nature and complexity of the site; health and environmental risks; the range of alternative actions considered to address site risks; the quality and reasonableness of the cost estimates for alternatives; regional, State/tribal, and other stakeholder opinions on the proposed actions to the extent they are known at the time of review; and any other relevant factors or program guidances.

Generally, the NRRB makes "advisory recommendations" to the appropriate Regional decision maker prior to issuance of the proposed plan who is expected to give the Board's recommendations substantial weight. However, other important factors may influence the final Regional decision such as subsequent public comment or technical analyses of remedial options. It is important to remember that the NRRB does not change the Agency's delegation authorities or alter in any way the public's current role in site decisions. This Reform is intended to bring to bear the programs extensive experience on decisions at a select number of high stakes sites.

NRRB Findings.

The NRRB reviewed the proposed plan for the Petrochem/Ekotek site along with other relevant site information and discussed related issues with the EPA Regional Project Manager and State of Utah participants (J.D. Keetly, Project Manager, and Brad T. Johnson, CERCLA Branch Manager) on January 31, 1996. Based on this review and discussion, the members of the NRRB make the following observations:

The National Oil and Hazardous Substances Pollution Contingency Plan (NCP) sets forth program expectations for the Agency in developing appropriate remedial alternatives. One such expectation is to treat principal threats, wherever practicable. Another expectation is to contain low level threats, because treatment for these wastes is likely not to be cost effective or practicable. For many sites, the NCP further states that EPA expects to use a combination of treatment and containment. While no exact definition of principal threat and low-level threat has been provided, EPA has issued "A Guide to Principal Threat and Low Level Threat Wastes," which indicates that low level threats would include "low toxicity source material... soil concentrations not greatly above reference dose levels or that present an excess cancer risk near the acceptable risk range."

- o Based on these NCP expectations and previous program experience, the NRRB fully supports the proposed remedial approach for addressing light non-aqueous phase liquids (LNAPLs), soil hot spots, and contaminated debris which constitute the principle threats at the Petrochem site. The NRRB also fully supports the proposed approach for addressing contaminated groundwater.

- o However, based on the analysis of available information and related discussions, as well as other NCP expectations and Superfund program experience, the NRRB recommends the following:

- The Region should reconsider the action proposed to address the low level contaminated soils at this site (i.e. thermal desorption). The Board believes that other approaches to remediating the threat of low level soil contamination, which could still fully satisfy the NCP, are available at significantly lower cost.

- The Region should continue to work closely with the State, community and other stakeholders to consider approaches taken at similar sites in other Regions, where low level soil contamination has been addressed through offsite disposal at a Subtitle D facility, use of various cover materials, containment, and/or land use controls or deed restrictions. These alternative approaches for addressing Superfund low level threats are fully protective of human health and the environment and allow for a wide range of recreational, commercial, or other beneficial uses.

- Notwithstanding the above comments, the NRRB also acknowledges that, overall, the proposed approach is not inconsistent with the NCP remedy selection criteria. The Board further recognizes that the Region must take into account the opinions of the community and

the State in making remedy selection decisions. Based on the information presented to the Board, it appears that in this case these two modifying criteria are the main drivers for the preference of a more costly remedy.

The NRRB appreciates the extensive Regional efforts already made in working closely with the State, community, and responsible parties to identify the currently proposed remedy. However, the NRRB believes that the Region may benefit from considering other less costly alternatives that address only the principal threats through treatment while yielding fully beneficial property use with minimum restrictions.

The Board members especially want to thank the Region and the State of Utah for their participation in the review process. We encourage Region 8 management and staff to work with the Regional NRRB representative and the OERR Region 3/8 Service Center at Headquarters to discuss appropriate followup actions. If you have any questions, please do not hesitate to call me at 703-603-8815.

cc: S. Luftig
E. Laws
T. Fields
J. Clifford
J. McGraw, Acting Regional Administrator
T. Sheckells, Region 3/8 Accelerated Response Center

bcc: L. Reed
E. Davies
L. Boornazian
NRRB Members
State representative (mail by Region)
M. Geisfeldt (ASTSWMO State Superfund Subcommittee Chair)

MEMORANDUM

SUBJECT: National Remedy Review Board Findings on the Operating Industries, Inc.

FROM: Bruce Means, Chairman
National Remedy Review Board

TO: Keith Takata, Director
Superfund Division
EPA Region 9

Purpose.

The purpose of this memorandum is to document the findings of the National Remedy Review Board (NRRB) on the proposed final site-wide remedial action at the Operating Industries, Inc. site in California.

Background.

As you recall, the NRRB was established as one of the October 1995 Superfund Administrative Reforms to help control remedy costs and promote both consistent and cost-effective decisions at Superfund sites. All proposed cleanup actions are to be reviewed by the Board where: (1) the estimated cost of the preferred alternative exceeds \$30M; or (2) the preferred alternative costs over \$10 M and this cost is 50% greater than that of the least-costly, protective, ARAR-compliant alternative. In its review, the NRRB considers the nature and complexity of the site; health and environmental risks; the range of alternative actions considered to address site risks; the quality and reasonableness of the cost estimates for alternatives; regional, State/tribal, and other stakeholder opinions on the proposed actions to the extent they are known at the time of review; and any other relevant factors or program guidances.

Generally, the NRRB makes "advisory recommendations" to the appropriate Regional decision maker prior to issuance of the proposed plan who is expected to give the Board's recommendations substantial weight. However, other important factors may influence the final Regional decision such as subsequent public comment or technical analyses of remedial options. It is important to remember that the NRRB does not change the Agency's delegation authorities or alter in any way the public's current role in site decisions. This Reform is intended to bring to bear the program's extensive experience on decisions at a select number of high stakes sites.

NRRB Findings.

The NRRB reviewed relevant site information submitted on this site and discussed

related issues with both the EPA Regional and State Remedial Project Managers on January 31, 1996. Based on this review and related discussion, the NRRB finds the proposed site-wide remedy to be consistent with actions at similar sites in other EPA Regions. Further, the NRRB finds that the proposed remedial action meets requirements set forth in the National Oil and Hazardous Substances Contingency Plan (NCP) and applicable program guidance.

The Board members would especially like to thank the State and Regional staff for their support and participation in this review process. If you have any questions about these findings, please call me at 703-603-8815.

cc: S. Luftig
E. Laws
T. Fields
J. Clifford
F. Marcus
M. Newton

MEMORANDUM

SUBJECT: National Remedy Review Board Findings on the Fernald
Environmental Management Project Site - OU3

FROM: Bruce Means, Chairman
National Remedy Review Board

TO: William E. Muno, Director
Superfund Division
EPA Region 5

Purpose.

The purpose of this memorandum is to document the findings of the National Remedy Review Board (NRRB) on the proposed remedial action described as OU3 for the Fernald Environmental Management Project Site in Ohio.

Background.

As you recall, the NRRB was established as one of the October 1995 Superfund Administrative Reforms to help control remedy costs and promote both consistent and cost-effective decisions at Superfund sites. All proposed cleanup actions are to be reviewed by the Board where: (1) the estimated cost of the preferred alternative exceeds \$30M; or (2) the preferred alternative costs over \$10 M and this cost is 50% greater than that of the least-costly, protective, ARAR-compliant alternative. In its review, the NRRB considers the nature and complexity of the site; health and environmental risks; the range of alternative actions considered to address site risks; the quality and reasonableness of the cost estimates for alternatives; regional, State/tribal, and other stakeholder opinions on the proposed actions to the extent they are known at the time of review; and any other relevant factors or program guidances.

Generally, the NRRB makes "advisory recommendations" to the appropriate Regional decision maker prior to issuance of the proposed plan who is expected to give the Board's recommendations substantial weight. However, other important factors may influence the final Regional decision such as subsequent public comment or technical analyses of remedial options. It is important to remember that the NRRB does not change the Agency's delegation authorities or alter in any way the public's current role in site decisions. This Reform is intended to bring to bear the program's extensive experience on decisions at a select number of high stakes sites.

NRRB Findings.

The NRRB reviewed relevant information submitted by Region 5 on OU 3 for the Fernald Environmental Management Project Site and discussed related issues with Region 5 staff on March 4 and 12, 1996. A representative from the Ohio Environmental Protection Agency participated in the conference call on March 12. Based on this review and related discussion, the NRRB finds the proposed remedy to be cost-effective and consistent with other actions taken at this site. Further, the NRRB finds that the proposed remedial action fully satisfies the requirements set forth in the National Oil and Hazardous Substances Contingency Plan (NCP) and applicable program guidance. Finally, the NRRB acknowledges that potentially cost-saving refinements to the remedy may occur during the design phase as a result of already planned value engineering studies, and the potential to recycle waste materials.

The Board members would like to thank Regional staff and management for their support and participation in this review process. If you have any questions about these findings, please call me at 703-603-8815.

cc: V. Adamkas
S. Luftig
E. Laws
T. Fields
J. Woolford
J. Breen
J. Clifford
P. Nadeau

MEMORANDUM

SUBJECT: National Remedy Review Board Recommendations on the DuPont, Necco Park Site.

FROM: Bruce Means, Chair
National Remedy Review Board

TO: Richard L. Caspe, Director
Emergency and Remedial Response Division
EPA Region 2

The purpose of this memorandum is to document the findings of the National Remedy Review Board (NRRB) on the proposed remedial action for the DuPont, Necco Park Site in New York State.

Background.

As you recall, the Administrator established the NRRB as one of the October 1995 Superfund Administrative Reforms to help control remedy costs and promote consistent and cost-effective decisions. The Board will review all proposed cleanup actions where: (1) the estimated cost of the preferred alternative exceeds \$30 million, or (2) the preferred alternative costs more than \$10 million and is 50% more expensive than the least-costly, protective, ARAR-compliant alternative. In its review, the NRRB considers the nature and complexity of the site; health and environmental risks; the range of alternatives that address site risks; the quality and reasonableness of the cost estimates for alternatives; regional, State/tribal, and other stakeholder opinions on the proposed actions (to the extent they are known at the time of review); and any other relevant factors or program guidance.

Generally, the NRRB makes "advisory recommendations" to the appropriate Regional decision maker before the Region issues the proposed plan. These recommendations are then to be included in the Administrative Record for the site. While the Region is expected to give the Board's recommendations substantial weight, other important factors, such as subsequent public comment or technical analyses of remedial options, may influence the final Regional decision. It is important to remember that the NRRB does not change the Agency's delegation authorities or alter in any way the public's current role in site decisions. This Reform is intended to focus the program's extensive experience on decisions at a select number of high stakes sites.

-- Pre-Decisional; Not for Distribution --

NRRB Findings.

The NRRB reviewed the proposed plan for the Necco Park site along with other relevant site information with Regional staff, including Dale Carpenter, Kevin Lynch, and George Shanahan, on May 7, 1996. Based on the information provided, the NRRB generally supports the Agency's proposal for source control presented in Alternative 9.

Key objectives of Alternative 9 are to minimize constituent loading to the far-field aquifer, create a physical barrier to subsurface DNAPL migration, minimize precipitation percolation through contaminated soil in the DNAPL source area, prevent direct human contact with contaminated soil, and reduce the overall volume of subsurface DNAPL. Based on these objectives, the NRRB recommends:

- At this time, the scope of the ROD should be limited to source control only, and should not make a final decision on off-site ground water in the far field aquifer. The Board recommends that this proposed alternative include evaluating the impact of the source control remedy on far-field groundwater contamination.
- Additional site characterization (sampling and analysis) should be conducted to assess whether natural attenuation may be effective in addressing far-field contamination.
- The proposed alternative includes upgrading the existing cap over portions of the Necco Park site to reduce percolation within the source area, while at the same time leaving other areas within the source area uncovered. The Region should consider extending the cap (or the use of other cover materials) to address infiltration in areas within the proposed grout curtain but not currently addressed by this upgrade.
- Given the status (i.e., near completion) of cleanups for other sites in the area and that several unsuccessful attempts were made to design an area-wide multi-source cleanup strategy, the Board supports the current source-by-source approach for addressing regional contamination. However, the RRB notes that conditions in this area suggest a more global, or multi-source cleanup/waste management strategy may have been appropriate, and recommends that the Region evaluate this type of approach for any future proposed remediation of the far-field aquifer contamination. For example, the Region may want to assess, as a future alternative, a strategy of adapting existing man-made structures, such as the Falls Street tunnel and the NYPA conduit drain jacket system, as an integral part of a collection system for multi-source treatment of far field contamination.

-- Pre-Decisional; Not for Distribution --

The NRRB appreciates the Region's efforts to develop the proposed remedy. The Board especially wants to thank the Region for their participation in the review process. The NRRB encourages Region 2 management and staff to work with their Regional NRRB representative and the OERR Region 2/6 Regional Accelerated Response Center at Headquarters to discuss appropriate follow-up actions.

Please do not hesitate to give me a call at 703-603-8815 should you have any questions.

cc: S. Luftig
E. Laws
T. Fields
B. Breen
J. Fox
E. Shaw

-- Pre-Decisional; Not for Distribution --

MEMORANDUM

SUBJECT: National Remedy Review Board Recommendations on the Roebling Steel Company Superfund Site

FROM: Bruce Means, Chair
National Remedy Review Board

TO: Richard L. Caspe, Director
Emergency and Remedial Response Division
EPA Region 2

Purpose.

The purpose of this memorandum is to document the findings of the National Remedy Review Board (NRRB) on the proposed remedial action for the Roebling Steel Company Superfund Site in Florence Township, New Jersey.

Background.

As you recall, the Administrator established the NRRB as one of the October 1995 Superfund Administrative Reforms to help control remedy costs and promote consistent and cost-effective decisions. The Board will review all proposed cleanup actions where: (1) the estimated cost of the preferred alternative exceeds \$30 million, or (2) the preferred alternative costs more than \$10 million and is 50% more expensive than the least-costly, protective, ARAR-compliant alternative. In its review, the NRRB considers the nature and complexity of the site; health and environmental risks; the range of alternatives that address site risks; the quality and reasonableness of the cost estimates for alternatives; regional, State/tribal, and other stakeholder opinions on the proposed actions (to the extent they are known at the time of review); and any other relevant factors or program guidance.

Generally, the NRRB makes "advisory recommendations" to the appropriate Regional decision maker before the Region issues the proposed plan. These recommendations are then to be included in the Administrative Record for the site. While the Region is expected to give the Board's recommendations substantial weight, other important factors, such as subsequent public comment or technical analyses of remedial options, may influence the final Regional decision. It is important to remember that the NRRB does not change the Agency's delegation authorities or alter in any way the public's current role in site decisions. This Reform is intended to focus the program's extensive experience on decisions at a select number of high stakes sites.

-- Pre-Decisional; Not for Distribution --

NRRB Findings.

The NRRB reviewed the proposed plan for the Roebling Steel Company site, along with other relevant site information, and discussed related issues with EPA Regional Project Manager Tamara Rossi on June 25, 1996. Based on this review and discussion, the NRRB generally supports the Agency's proposed cleanup strategy as presented in Alternative 3 of the proposed plan. However, the NRRB makes the following observations:

- The NRRB suggests that the Region consider an additional alternative that would consist of: (1) demolishing the "A Buildings" (those buildings that are contaminated and structurally unsound) and disposing the contaminated debris in an on-site landfill; and (2) decontaminating the "B Buildings" (which are also contaminated but structurally sound) to a risk level suitable for the expected future use. This recommendation should not be viewed as a proposal to select this alternative; only as a suggestion to evaluate it alongside others considered.
- Alternative 1, identified in the draft Proposed Plan as "*no further action with institutional controls*," should be amended to evaluate only "*no further action*" in order to establish the true baseline condition. Institutional controls should not be included as part of a no action alternative.
- Alternative 2, as it is explained in the draft proposed plan, does not appear to pass the NCP threshold criteria. It does not address lead contamination in the buildings, which contributes significantly to site risks.
- If the Region chooses Alternative 3, the Board believes that fine-tuning the building-specific decontamination strategies may save money during remedial design. For this analysis it may help to evaluate the per-building cost for varying decontamination levels and compare that data to the target residual risk levels. The Region should consider using value engineering to explore these opportunities.
- The Board encourages the Region, during the post-ROD remedial design phase, to continue working with potential site developers to determine the level of building decontamination necessary for potential future use. The remedy should not spend resources on decontaminating buildings for future use if the buildings will later be demolished by site developers.

The NRRB appreciates the Region's efforts to work closely with the State and community to identify the current proposed remedy. The Board especially wants to thank the Region and the State of New Jersey for their participation in the review process. The Board encourages Region 2 management and staff to work with their

-- Pre-Decisional; Not for Distribution --

Regional NRRB representative and the Headquarters Region 2/6 Regional Accelerated Response Center to discuss appropriate follow-up actions.

Please do not hesitate to give me a call at 703-603-8815 if you have any questions.

cc: S. Luftig
E. Laws
T. Fields
B. Breen
J. Fox
E. Shaw

-- Pre-Decisional; Not for Distribution --

MEMORANDUM

SUBJECT: National Remedy Review Board Recommendations on the Jack's Creek Superfund Site

FROM: Bruce Means, Chair
National Remedy Review Board

TO: Thomas C. Voltaggio, Director
Hazardous Waste Management Division, Region 3

Purpose

The National Remedy Review Board (NRRB) has completed its review of the proposed remedial action for the Jack's Creek Superfund Site in Maitland, Pennsylvania. This memorandum documents the NRRB's advisory recommendations.

Context for NRRB Review

As you recall, the Administrator announced the NRRB as one of the October 1995 Superfund Administrative Reforms to help control remedy costs and promote consistent and cost-effective decisions. The NRRB furthers these goals by providing a cross-regional, management-level, "real time" review of high cost (and thus potentially controversial) proposed response actions. The Board will review all proposed cleanup actions where: (1) the estimated cost of the preferred alternative exceeds \$30 million, or (2) the preferred alternative costs more than \$10 million and is 50% more expensive than the least-costly, protective, ARAR-compliant alternative. In its review, the NRRB considers the nature and complexity of the site; health and environmental risks; the range of alternatives that address site risks; the quality and reasonableness of the cost estimates for alternatives; Regional, State/tribal, and other stakeholder opinions on the proposed actions (to the extent they are known at the time of review); and any other relevant factors or program guidance.

Generally, the NRRB makes "advisory recommendations" to the appropriate Regional decision maker before the Region issues the proposed plan. The Region will then include these recommendations in the Administrative Record for the site. While the Region is expected to give the Board's recommendations substantial weight, other important factors, such as subsequent public comment or technical analyses of remedial options, may influence the final Regional decision. It is important to remember that the NRRB does not change the Agency's delegation authorities or alter in any way the public's role in site decisions.

-- Pre-Decisional; Not for Distribution --

NRRB Advisory Recommendations

The NRRB reviewed the draft proposed plan (dated June 1996) for the Jack's Creek Site, a submission by potentially responsible parties for the site, and other relevant site information, and discussed site issues with EPA Region 3 Remedial Project Manager Garth Connor and Commonwealth of Pennsylvania representatives on June 26, 1996. Based on this review and discussion, the NRRB does not believe there is sufficient information at this time to support the draft proposed plans' preferred alternative (alternative 9). Specific concerns include the following elements that were not clearly defined: site specific remedial action objectives (including a clear rationale for determining a principal threat level for lead in soils above which treatment is necessary), and current and future impacts on ground water. These concerns along with other recommendations are described below.

First, the Region should clarify the rationale for how contamination will be addressed in the context of site-specific remedial action objectives. For example, if treatment in alternative nine is preferred because contaminant levels greater than 10,000 ppm lead are believed to constitute a principal threat at this site, the Region should more thoroughly explain the basis for determining this lead concentration. The Preamble to the NCP sets out a program expectation regarding the treatment of principal threats wherever practicable, and defines a principal threat “. . . as wastes that cannot be reliably controlled in place, such as liquids, highly mobile materials (e.g., solvents), and high concentrations of toxic compounds (e.g., several orders of magnitude above levels that allow for unrestricted use and unlimited exposure).”

The NRRB acknowledges that lead concentrations at the Jack's Creek site are sufficiently high (up to 160,000 PPM) as to constitute a principal threat at some level. However, the Regional rationale for determining the principal threat level above which treatment is practicable and deemed necessary is unclear. Such a level should be determined on a site-specific basis and may be justified in several different ways. The Region should refer to “A Guide to Principal Threat and Low Level Threat Wastes” Superfund Publication 9380.3-06FS, dated November 1991 for additional information. Also, in considering this issue, the Region may benefit from conducting site-specific fate and transport modeling to help evaluate the potential threat of lead leaching to ground water from the proposed containment area. It is important to remember that while the NCP expectations and the principal threat guidance support the development of alternatives, the selection of an appropriate waste management strategy is determined ultimately through the remedy selection process outlined in the NCP (i.e., all remedy selection decisions are site-specific and must be based on a comparative analysis of the alternatives using the nine criteria).

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A second fundamental concern of the NRRB is that the analysis did not clearly define current and future impacts from the site on groundwater. The narrative provided by the Region suggests elevated contamination levels in domestic drinking water sources on a sporadic basis. Further, the RPM for the site indicated that another round of samples had been taken and results were expected in the near future. The NRRB recommends that any impacts, especially as they might result in contamination of domestic supply wells, be sufficiently characterized and addressed through remedial action as necessary. Fate and transport modeling may be helpful in these analyses.

In addition, the NRRB offers the following recommendations:

The Region should consider using one or more of the recently developed adult lead exposure models (e.g., the “Bowers model” currently under consideration by a subgroup of the Superfund Lead Technical Review Workgroup) to assist in the evaluation of baseline risk, and to help establish a site-specific lead cleanup level. Although not yet adopted in formal Agency policy, use of such a model can help fine-tune, or provide additional scientific and technical support for the Region’s proposed soil lead cleanup level.

Also, the NRRB noted its support for the inclusion of the limited actions described in alternative two as part of any selected remedial action for the site. This support was qualified by the recommendation that these limited actions also include groundwater monitoring and an action to permanently prevent the domestic use of any onsite contaminated groundwater.

Finally, the NRRB questions the appropriateness of the proposed reconstruction of wetlands at Jack’s Creek as a fund-financed action. Based on the information presented, this action does not appear to be an appropriate remediation expenditure. Creating a new wetland to replace one destroyed by the apparent expansion of site operations is not an integral part of addressing the current or potential risks from site-specific contamination. This situation should be distinguished from situations in which cleaning up site contamination damages the wetlands. In these cases, restoring the affected wetlands under Superfund authorities would be appropriate. The NRRB recommends that the Region explore other authorities to pursue the proposed wetlands work at Jack’s Creek.

The Board members especially want to thank the Region and the Commonwealth of Pennsylvania for their participation in the review process. We encourage Region 3 management and staff to work with their Regional NRRB representative and the OERR Region 3/8 Accelerated Response Center at

-- Pre-Decisional; Not for Distribution --

Headquarters to discuss appropriate follow-up actions. If you have any questions, please do not hesitate to call me at 703-603-8815.

CC: W. M. McCabe
S. Luftig
E. Laws
T. Fields
T. Sheckells
B. Breen

-- Pre-Decisional; Not for Distribution --

MEMORANDUM

SUBJECT: National Remedy Review Board Recommendations on the New Bedford Harbor Superfund Site

FROM: Bruce Means, Chair
National Remedy Review Board

TO: Linda M. Murphy, Director
Office of Site Remediation and Restoration
EPA Region 1

Purpose

The National Remedy Review Board (NRRB) has completed its review of the proposed remedial action for the New Bedford Harbor Superfund site in New Bedford, Massachusetts. This memorandum documents the NRRB's advisory recommendations.

Context for NRRB Review

As you recall, the Administrator announced the NRRB as one of the October 1995 Superfund Administrative Reforms to help control remedy costs and promote consistent and cost-effective decisions. The NRRB furthers these goals by providing a cross-regional, management-level, "real time" review of high cost (and thus potentially controversial) proposed response actions. The Board will review all proposed cleanup actions where: (1) the estimated cost of the preferred alternative exceeds \$30 million, or (2) the preferred alternative costs more than \$10 million and is 50% more expensive than the least-costly, protective, ARAR-compliant alternative. In its review, the NRRB considers the nature and complexity of the site; health and environmental risks; the range of alternatives that address site risks; the quality and reasonableness of the cost estimates for alternatives; Regional, State/tribal, and other stakeholder opinions on the proposed actions (to the extent they are known at the time of review); and any other relevant factors or program guidance.

Generally, the NRRB makes "advisory recommendations" to the appropriate Regional decision maker before the Region issues the proposed plan. The Region will then include these recommendations in the Administrative Record for the site. While the Region is expected to give the Board's recommendations substantial weight, other important factors, such as subsequent public comment or technical analyses of remedial options, may influence the final Regional decision. It is important to remember that the NRRB does not change the Agency's delegation authorities or alter in any way the public's role in site decisions.

-- Pre-Decisional; Not for Distribution --

NRRB Advisory Recommendations

The NRRB reviewed the proposed plan for the New Bedford Harbor site, along with other relevant site information, on August 14th, 1996. The Board discussed the site with Commonwealth of Massachusetts Project Officer Paul Craffey, EPA RPM David Dickerson, EPA site attorney Cindy Catri, and Office of Site Remediation and Restoration Deputy Director Frank Ciavattieri. Based on this review and discussion, the NRRB generally supports the Agency's proposed cleanup strategy as presented in the proposed plan. The NRRB makes the following observations:

- The Commonwealth and Region have ensured that community interests are well represented in the decision making process through the use of several techniques, including professional facilitation. The Board accepted the Memorandum of Agreement announced on August 1, 1996, outlining the community's support of the proposed remedy as representing community concerns and issues.
- The NRRB believes that the air monitoring costs are high, given the nature of the proposed remedial action and contaminants to be addressed. The Board recommends that the Region carefully examine the need for what appears to be an overly extensive air monitoring program.
- The water treatment costs appear to be disproportionately large relative to the overall remediation costs. The Board recommends that the Region examine the Commonwealth and Federal ARARs that drive the stringency of the effluent discharge limits to determine whether a less costly treatment process would be adequate.
- The Board also notes that the proposed remedial actions targeting PCBs will address the highest concentrations of metals as well. If Region 1 selects a PCB cleanup goal other than the proposed 10 ppm/50 ppm for the upper and lower harbor, respectively, they should examine the effect of this change on metal remediation.

The NRRB appreciates the Region's efforts to work closely with the Commonwealth, local government and community to identify the current proposed remedy. The Board members also express their appreciation to both the Region and the Commonwealth of Massachusetts for their participation in the review process. We encourage Region 1 management and staff to work with their Regional NRRB representative and the Region 1/9 Regional Accelerated Response Center at Headquarters to discuss appropriate follow-up actions.

Please do not hesitate to give me a call if you have any questions at 703-603-8815.

-- Pre-Decisional; Not for Distribution --

cc: J. DeVillars
S. Luftig
E. Laws
T. Fields
M. Newton

-- Pre-Decisional; Not for Distribution --

ATTACHMENT 6

**9/26/96 EPA Memorandum:
“National Superfund Remedy Review Board”**

MEMORANDUM

SUBJECT: National Remedy Review Board

FROM: Stephen D. Luftig, Director
Office of Emergency and Remedial Response

TO: Director, Office of Site Remediation and Restoration
Region I
Director, Emergency and Remedial Response Division
Region II
Director, Hazardous Waste Management Division
Regions III, IX
Director, Waste Management Division
Region IV
Director, Superfund Division
Regions V, VI, VII
Assistant Regional Administrator, Office of Ecosystems
Protection and Remediation
Region VIII
Director, Environmental Cleanup Office
Region X

Purpose

The purpose of this memorandum is to update you on National Remedy Review Board progress and bring to your attention important Board operating procedures.

Background

As you know, Assistant Administrator Elliott Laws formed the Board in November 1995 as part of Administrator Browner's Superfund reform initiatives. The Board's goals are to help control remedy costs and promote consistent and cost-effective decisions at Superfund sites. It has been functioning since January 1996. Though impeded by FY 96 appropriation delays, to date, the Board has held four meetings and numerous conference calls, during which it completed reviews on twelve sites. The Board has also worked to finalize the procedures under which it will operate in the near future.

This dedicated group of Regional and national Agency experts, coupled with the hard work of many Regional program colleagues, has already contributed greatly to improved consistency and cost effectiveness in cleanup decisions. I want to thank you and your staff especially for working so closely with us during this important first year. Board efforts in FY 96 will be detailed in a year-end report for your information.

Key Operating Protocol

To ensure that the upcoming fiscal year's Board activities are as productive as those of the past nine months, we need your continued assistance. An effective site review requires significant advance preparation, organization, and time commitment from the Regional management and staff who participate. In particular, the RPM is responsible for several important coordination functions as highlighted below. I recognize that the past year's budget situation has stretched our already limited resources. Nonetheless, it is essential that we commit the resources necessary to guarantee informed and constructive dialogue at Board meetings.

For your information, the text below highlights several important operating protocol describing how the Board expects to work with the Regions, involve important stakeholders and handle the timing of reviews. Involvement of the Board is a key step for many sites in the Superfund remedy selection process. Each Regional office is responsible for ensuring that these protocol are followed to avoid delaying proposed plan issuance.

Regional Responsibilities

As indicated in the original Reform language, the Board makes “advisory recommendations” to the Regional decision maker who then makes the final remedy decision giving consideration to the complete range of available information. While the Region is expected to give the Board’s recommendations substantial weight, other important factors, such as subsequent public comment or technical analyses of remedial options, may influence the final Regional decision. It is important to remember that the NRRB does not change the Agency’s delegation authorities or alter in any way the public’s role in site decisions. It is expected, however, that the Regions will provide for the record a written response to Board recommendations. In general, a Region should not issue the proposed plan until it has received and considered the written Board recommendations.

State/Tribal Involvement

The Board recognizes that the states and tribes have a unique role in the Superfund program as “co-regulators,” and has taken steps to ensure their significant involvement in the review process. With this in mind:

- The Region is to consult with the affected state or tribal government well before the Board meetings to ensure that key decision makers understand the background and intent of the review process. The Region should also make clear that the states and tribes will have the opportunity to present their views directly to the Board.
- As part of current procedure, the Region develops an informational site package that forms the basis of Board review. The Board asks that each Region work with appropriate state and tribal personnel to ensure that the “summary of state issues” section of that package is accurately developed.
- The Regional RPM is to distribute the full site package to the appropriate state and/or tribe concurrent with Board distribution. He or she should also solicit their general reaction to the material at this time.
- For each site, the Board meets in two stages: information-gathering and deliberations. The Board will routinely invite state and/or tribal decision makers to the information-gathering phase of its site reviews. The Board will invite the state and/or tribe to participate in the deliberative discussion for state-lead fund-financed decisions, and for state/tribe enforcement-lead decisions where the state/tribe seeks EPA concurrence. Otherwise, the Board will limit its deliberative discussion to Agency personnel.

PRP Involvement

- Private parties significantly involved with the site study and/or response actions are to be notified by the appropriate Regional office of the Board's site review.
- The Board believes that PRPs who conduct the RI/FS can provide valuable input to the review process. Therefore, the Regional RPM is to solicit technical comment or discussion, well before the Board meetings, from the PRPs that are substantively involved in conducting the RI/FS. These submissions should not exceed five pages in length, and should be attached to the informational site package provided to all Board members.
- The Board recognizes that PRPs who do not conduct the RI/FS may conduct studies that might also be valuable to the Board's review process. In these cases, the Region may, at its discretion, solicit similar input from these stakeholders.

Community Involvement

- For sites at which EPA has awarded a Technical Assistance Grant (TAG) or recognized a Community Advisory Group (CAG), the Region is to notify appropriate contacts well before the meeting and ensure they also understand the review process.

- The Region is to offer the TAG recipient and/or CAG the opportunity to submit written comments or concerns to the Board concerning site-specific issues they think will be important to the Board's discussions. These submissions are also limited to five pages in length.
- Where the Region has established substantial working relationships with other stakeholder groups early in the RI/FS process, the Region may, at its discretion, offer similar opportunity for written comment from these parties.

Timing of Review

- The Board plans to review sites early in the remedy selection process, before the Region releases the proposed plan for public comment.
- Occasionally, however, a post-proposed plan site may benefit from Board review. For example, remedy changes in response to public comment may increase the total remedy costs. Where these additional cleanup costs exceed 20 percent of the original cost estimate and trigger normal Board review criteria, the Board may review the draft remedy.

Federal Facilities Review Criteria

The Board is continuing its discussions with representatives from the Federal Facilities Restoration and Reuse Office (FFRRO), the Federal Facilities Enforcement Office (FFEO), and with other federal agencies to develop review criteria for federal facility sites. While these final criteria are under development, FFRRO and FFEO have recommended the following interim criteria:

- For federal facility sites where the primary contaminant is radioactive waste, the Board will raise the dollar trigger from \$30 million to \$60 million and delete the “50% greater than the least costly alternative” criterion.
- The Board will not review NPL site decisions on Base Realignment and Closure (BRAC) sites.
- All other federal facility sites (i.e., those that involve non-radioactive waste only) are subject to standard review criteria.

To assist you in communicating with other Superfund stakeholders about the Board review process, I am attaching to this memorandum a fact sheet titled “Questions and Answers on EPA's NRRB.” Additional tools to assist you and your staff with the review process will be available shortly.

I believe this Reform has accomplished much during the past nine months. The hard work put forth by your staff and the Board members has paid off in significant cost savings. I look forward to similar success over the next fiscal year. Finally, the Board plans to continue its dialogue with interested stakeholders to work toward a process that is agreeable and fair to all involved. We welcome your thoughts in this area as well.

Please contact me, or National Remedy Review Board Chair Bruce Means (at 703-603-8815) if you have any questions or comments.

cc: E. Laws
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ROUND THREE: SUPERFUND REFORMS AT A GLANCE

EPA National Superfund Remedy Review Board

This reform is one of twenty new "common sense" administrative reforms announced in October 1995, by US EPA Administrator Carol Browner. These reforms will fundamentally redirect the Superfund program to make it faster, fairer, and more efficient.

WHAT IS THE NATIONAL REMEDY REVIEW BOARD?

The National Remedy Review Board (the Board) is one of the principle Superfund Reforms that Administrator Browner announced in October 1995. Its goal is to promote cost-effectiveness and appropriate national consistency in remedy selection at Superfund sites. To accomplish this, the Board analyzes proposed site-specific cleanup strategies to ensure they are consistent with current law and regulations. The Board also considers relevant Agency guidance. The Board's members are technical experts and managers from each EPA Region and several EPA Headquarters offices.

After its review, the Board issues recommendations as to how or whether a potential Superfund site remedy decision can be improved. Although Board recommendations are not binding, EPA Regional decision makers give them substantial consideration. EPA believes the Board is contributing significantly to more cost-effective, consistent Superfund remedies.

WHAT ARE THE CRITERIA THAT TRIGGER BOARD REVIEW?

The Board will review proposed remedies for which (1) the proposed remedy cost is more than \$30 million; or (2) the proposed remedy costs more than \$10 million and is 50% greater than the least-costly, protective cleanup alternative that also complies with other laws or regulations that are either "applicable" or "relevant and appropriate" to a site decision.

The Board expects to review every proposed decision that meets the above criteria at Superfund sites that are not Federal facilities. Because of their size and complexity, the Board is developing a separate set of Federal facility site review criteria. EPA encourages anyone with concerns about a particular site to contact the EPA Region in which that site resides.

WHAT DOES THE BOARD LOOK AT WHEN IT REVIEWS A SITE?

The Board analyzes the cleanup strategy to ensure that it is consistent with the Superfund law and the National Oil and Hazardous Substances Pollution Contingency Plan (or NCP). The NCP is the Federal regulation that details procedures for responding to oil or hazardous substance releases. The Board also considers relevant EPA cleanup guidance.

When they review a site, the Board members ask many questions about the proposed cleanup strategy. Site-specific circumstances often influence the nature of the discussion. Among others, Board members investigate subjects like these below:

- What are the details of the Regional proposal for site cleanup?
- What are the positions of the State/Tribe, potentially responsible parties (PRPs), and communities?
- Will the cleanup strategy be effective?
- What is the rationale behind exposure scenarios and risk assumptions?
- Are the cleanup goals appropriate and attainable?
- Have other approaches to achieve the cleanup goals been evaluated?
- Are the cost estimates reasonable?
- Is the strategy consistent with other Agency decisions?

WHAT IS THE ROLE OF INTERESTED PARTIES IN THE REVIEW PROCESS?

Community Involvement

For sites at which EPA has awarded a Technical Assistance Grant (TAG) or recognized a Community Advisory Group (CAG), the Region will notify appropriate contacts well before the Board meets to ensure they understand the nature and intent of the review process.

The Region will offer the TAG recipient and/or CAG the opportunity to submit written comments or concerns to the Board concerning site-specific issues they think are important. These submissions are limited to five pages in length.

Where the Region has established substantial working relationships with other interested groups early in the RI/FS process, the Region, at its discretion, may offer similar opportunity for written comment.

State/Tribe Involvement

The Board recognizes the unique State/Tribe role in the Superfund program as “co-regulators,” and has taken steps to ensure significant State involvement in the review process.

The Region will consult with the affected State/Tribe well before the Board meeting to ensure that key State/Tribe decision makers understand the nature and intent of the review process. They will also make clear that the State/Tribe will have the opportunity to present their views at Board meetings.

As part of current procedure, the Region develops an informational site package that forms the basis of Board review. The Board will ask that each Region work with the appropriate State/Tribe to ensure that the “summary of State issues” section of that package is accurately developed.

The Region will distribute the full site package to the appropriate State/Tribe concurrent with Board distribution. They also will solicit the State/Tribe's general reaction to the material.

For each site, the Board meets in two stages: information-gathering and deliberations. The Board will routinely invite State/Tribe decision makers to the information-gathering phase of its site reviews. The Board will invite the State/Tribe to participate in the deliberative discussion for State/Tribe-lead Fund-financed decisions, and for State/Tribe enforcement-lead decisions where the State/Tribe seeks EPA concurrence. Otherwise, the Board will limit its deliberative discussion to Agency personnel.

PRP Involvement

The Board believes that PRPs who conduct the RI/FS can provide valuable input to the review process. Therefore, the Regional Project Manager (RPM) will solicit technical comment or discussion, well before the Board meetings, from the PRPs that are substantively involved in conducting the RI/FS. These submissions should not exceed five pages in length, and should be attached to the informational site package provided to all Board members.

The Board also recognizes that PRPs who do not conduct the RI/FS may conduct valuable studies. In these cases, the Region, at its discretion, may solicit similar input.

HOW DO I FIND OUT WHETHER THE RRB WILL REVIEW A SITE?

If you have questions about a particular Superfund site, please call the EPA Region in which it is located. They will put you in touch with someone who knows about the site.

FOR MORE INFORMATION.

You may also call EPA's Superfund Hotline at 1-800-424-9346 (or 703-412-9810 within the Washington, D.C. area) to get general information about EPA, the Remedy Review Board, and the Superfund program. The Hotline will refer you to the appropriate EPA Region, program office, or staff member should you have questions they cannot answer.